P A T E N T C L A I M S

1. Network security system for detecting security relevant irregularities in a network, comprising

   data sources located on and/ or constituting the network, with

      means for generating network-security relevant data;

   an input module, with

      input handlers for various protocols to connect to the data sources;

   at least one processing module, connected to said input module for access to said data sources, with

      means for translating said network-security relevant data into quantitative variables;

   a supervisory system, with

      means for presenting processed data to a security system operator; and

   an interface module, with

      means for transferring said quantitative variables from the processing module to the supervisory system.

2. Security system as in claim 1, characterized in, that

   said data sources comprise routers, firewalls, hosts, applications, switches, NIDS, HIDS or any combination thereof.

3. Security system as in any of claims 1 or 2, characterized in, that

   the network-security relevant data consists of
   numerical values maintained via increment/decrement operations, rate calculations, pass-through of values or evaluation of mathematical expressions involving multiple values or any combination thereof, and /or
   textual values maintained via template matching, text transformation, text translation, and composition of text from templates, text strings from incoming data and numerical values from incoming data or any combination thereof.

4. Security system as in any of claims 1 or 3, characterized in, that

   said supervisory system comprises

   means for displaying said variables to an system operator, and

   reaction facilities with means for initiating predefined countermeasures.

5. Security system as in any of claims 1 to 4, characterized in, that

   the processing modules act on individual incoming data messages and batches of those messages.

6. Security system as in any of claims 1 to 5, characterized in, that

   the displaying means display the security status/health information as quantitative trend graphs with historical data storage and zoom in/out function.

7. Security system as in any of claims 1 to 6, characterized in, that

   the displaying means display a schematical depiction of the network and device structure and topology.

8. Security system as in claims 7, characterized in, that

   the visual elements denote security status by means of coloring and/or numerical and/or textual annotations

9. Security system as in any of claims 1 to 8, characterized in, that

   the system further comprises

   storage means for maintaining temporary and persistent records of the results of the processing steps for later in-depth analysis.

10. Automation system operator workstation in a network with an automation system, comprising
    means for controlling the processes of the automation system over the network, said controlling means comprising a human machine interface with means for displaying information about the automation system to an automation system operator and means for entering commands for controlling the automation system,
    said automation system operator workstation being connected to a security system as claimed in any of the preceding claims, wherein
    the supervisory system is integrated into the automation system controlling means,

said status and trend presenting means being included in the information displaying system of the human machine interface, and said countermeasures initiating means being integrated in the commands entering means.